

# Amir Hamza

Greater NYC Area | A.Hamza8596@gmail.com | [LinkedIn.com/in/amirhamza](https://www.linkedin.com/in/amirhamza) | [GitHub.com/hhkhamza](https://github.com/hhkhamza) | [AmirHamza.com](https://AmirHamza.com)

## EDUCATION

**Brooklyn College, City University of New York (CUNY)**

**Expected Graduation: Dec 2025**

Bachelors of Science in Computer Science

## SKILLS

**Languages** *Proficient* JavaScript(3yrs) · Java(3yrs) *Intermediate* Python(1yr) · SQL(2yrs) *Beginner* PHP(1yr) · C++(1yr)

**Software** AWS · GCP · Langchain · Docker · Kubernetes · TensorFlow · JupyterNotebook · iOS · Bootstrap · Git · Bash

## EXPERIENCE

**Software Engineering Intern**

**Dec 2024 - Present**

[New Business Set-Up Inc](#)

New York, NY

- Currently developing OCR software and AI features to streamline and automate tax return preparation processes
- Set up and maintained a private, secure server, enabling multi-device access and collaboration
- Secured tax data for 3,000+ clients with a custom Robocopy script for backup and synchronization
- Resolved a system lockout issue by leveraging Hiren Boot CD, restoring and securing system access
- Developing custom software to organize invoice tracking and generation, replacing an inefficient manual system

**Software Engineering Resident**

**Sep 2024 - Present**

[Headstarter](#)

New York, NY

- Built 14+ machine learning, ai-engineering and full-stack projects in fast-paced software team environments
- Developed 5+ neural networks in Python, 11 apps in Typescript on AWS/Vercel with dev and production environments
- Implemented llm-chaining, hyperparameter tuning, fine tuning on 10+ LLM models controlling for latency & accuracy,
- Coached by Google Machine Learning, Google Kubernetes, Two Sigma, Tesla, Figma and Citadel Engineers
- Created 321+ commits on github with 7-day deadlines getting a Career Capital increase of 40% from start date

**Software Engineering Intern**

**Jun 2024 - Nov 2024**

[The Difference](#)

New York, NY

- Optimized data parsing in Dart/Flutter, ensuring accurate API retrieval for weight measurements
- Led a team to improve backend systems using PHP/Laravel, enhancing API efficiency for weight tracking
- Improved data validation, debugging, and error handling to ensure reliable weight tracking features

## AI PROJECTS

**US-Bank Churn Prediction** | Published Web-App (~30 hours) - [Github](#)

**Oct 2024 - Oct 2024**

- Used 30k+ data set, Llama 3.1b, Groq and Vercel to evaluate accuracy of predicting when banking customer quits
- Created an end-to-end solution complete with sending automated personalized email to banking customer based on feature engineering, normalization, model training, evaluating and hyperparameter tuning across 5 LLM models

**Brain Tumor Classification** | Published Web-App (~10 hours) - [Github](#)

**Nov 2024 - Nov 2024**

- Used neural networks in Python to classify 1000 MRI scans into 3 types of possible brain diseases with custom model
- Generated multimodal MRI reports for neurosurgeons in under 200MS after image classification, construction & training

**StockView** | Published Web-App (~30 hours) - [Github](#)

**Dec 2024 - Dec 2024**

- Built a web app leveraging NLP, LLM chaining, and pinecone embeddings to provide intelligent insights on company stocks, enabling users to query stock data using natural language
- Streamlined stock data processing with multithreaded Python scripts and optimized Pinecone database performance for faster retrieval and improved financial analysis

**Discord Live Video** | Published Web-App 1.6K Users (~40 hours) - [Github](#)

**Nov 2024 - Nov 2024**

- Used AWS, WebRTC, React and Vercel to deploy real-time chat and video functionality of popular gaming service
- Built 2+ production backend services that handle upto 10 real-time conversations processing 100GB of video every second

**Cheetcode - AI Technical Interview Prep** | Team Project - Published AI-App (~80 hours) - [Github](#)

**Aug 2024 - Sep 2024**

- Designed and implemented core features, including algorithm filtering, mock interviews with real-time AI feedback, and an optimized multi-language coding environment
- Integrated Piston API for code compilation, implemented a request delayer to prevent rate limits, and enhanced AI prompts to deliver context-aware feedback simulating real interviews

## Activities

CUNY Tech Prep Web Development Fellowship

**Jul 2023 - Jun 2024**

PerScholas Full-Stack SWE Bootcamp

**Sep 2022 - Jan 2023**

Olostep Hackathon Top 10 Team - [Github](#)

**Aug 2024 - Aug 2024**